

SYNOPSIS OF THE SUBDIVISIONS OF HOLOSPIRA AND SOME RELATED
 GENERA.

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Genus HOLOSPIRA Martens; type *H. pilocerei* Pfr.

Subgenus *Holospira* s. s.

Axis large, with an internal fold in the penultimate whorl and with a parietal, basal and peripheral lamina projecting into the lumen of that whorl. Besides the type, this includes *H. goldfussi* Menke and *H. goniosoma* Pfr.

Section *Bostrichocentrum* Strebel & Pfeffer, 1880.

Axis moderate, with a continuous plait, except in the last part of the last whorl; no laminae. Type *H. tryoni* Pfr. *H. veraeruzianus* Dall belongs here.

Section *Haplostemma* Dall, 1895.

Axis moderate, with, in the penultimate whorl only, a short, stout axial lamina extending about half a gyration, but no other laminae. Type *H. mearnsii* Dall, New Mexico.

Section *Eudistemma* Dall, 1895.

Penultimate whorl with a parietal and a short axial lamina only, axis moderate. Type *H. arizonensis* Stearns.

Section *Distomospira* Dall, 1895.

Penultimate whorl with a basal and a short, strong axial lamina only, axis moderate. Type *H. bilamellata* Dall, New Mexico.

Subgenus *Metastoma* Strebel & Pfeffer, 1880.

Axis smooth, without plaits, penultimate whorl without internal laminae. Type *H. raemeri* Pfr. This includes also *H. pasonis* Dall, *H. coahuilensis* Binn., *H. semisculpta* Stearns, *H. pfeifferi* Menke, *H. remondii* Gabb., *H. crossei* Dall, *H. pilsbryi* Dall.

Subgenus *Celostemma* Dall, 1895.

Axis vertically ribbed as in *Celocentrum*, shell otherwise as in *Metastoma*. Type *H. elizabethae* Pilsbry.

The internal characters of the following species are unknown: *H. gealei* A. Ads., *H. imbricata* Martens, *H. cretacea* Pfr., *H. microstoma* Pfr. and *H. teres* Menke.

Genus *Cœlocentrum* Crosse & Fischer, 1872.

Shell decollate, axis pervious.

Subgenus *Cœlocentrum* s. s.

Axis vertically ribbed internally. Type *C. turris* Pfr. This includes nearly all the known species.

Subgenus *Spartocentrum* Dall, 1895.

Axis as in *Bostrichocentrum*, not ribbed. Type *C. irregulare* Gabb., Lower California.

Genus *EUCALODIUM* Crosse & Fischer.

Shell resembling *Cœlocentrum*, but large, with a solid axis.

Section *Eucalodium* s. s. Type *E. ghiesbrechti* Pfr.

Axis sinuous and folded its whole length, except close to the aperture; transverse series of teeth on the radula long (65·1·65 in the type).

Section *Oligostylus* Pilsbry, 1895.

Axis straight and smooth; radula narrower (36·1·36 in the type). Type *E. blandianum* Crosse and Fischer.

Columna ramentosa J. G. Cooper, which might, from the shell, be assimilated either to *Berendtia*, *Rhodea*, or some of the above-mentioned groups, proves, from the anatomy, to be merely a section of *Bulimulus* closely related to *Leptobyrsus*. The genuine *Rhodea* very probably bears an analogous relation to *Otostomus*. It is viviparous, but the Lower Californian species is not. If the latter be deemed worthy of a sectional name, *Pseudorhodea* might be used for it. The new species of *Holospira* mentioned above are described in a report on the mollusks of the late Mexican Boundary Survey (1892-4), by the writer, which will appear, properly illustrated, in the report of the Commissioners of the Survey.

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The anatomy of a curious cylindrical Austrian land snail, *Pupa obtusa* Drap., has recently been investigated by Mr. A. Protz and Professor von Martens. It proves to be no *Pupa*, but a member of the *Helicidae*, closely allied to the chalky *Helices* of Europe known as *Helicella* or *Xerophila*.